Republicans' Partisan COMPETES Bill Disinvests in America's Competitiveness

This week, the House will vote on H.R. 1806, House Republicans' partisan bill to reauthorize the America COMPETES Act. Unlike the original bill in 2007 and the reauthorization in 2010, which both passed with strong bipartisan support, the America COMPETES Reauthorization Act of 2015 was reported by the Science Committee on a party line basis and has no chance of being signed into law.

H.R. 1806 politicizes grant funding, rolls back investment in scientific research, and disinvests in areas that help increase America's competitiveness by:

- Keeping overall research and development funding flat and arbitrarily funding programs Republicans like while cutting programs they ideologically oppose. [Fact Sheet, May 2015]
- Limiting the types of research that receive funding from the National Science Foundation (NSF) by designating some scientific disciplines as higher priority. [Science Magazine, 4/22/15]
- Disinvesting in American graduate students and STEM education by drastically cutting funding for the prestigious 60-year old National Graduate Research Fellowship Program. [Minority Report, <u>5/8/15</u>]
- Cutting NSF's funding for social, behavioral, and economic (SBE) sciences research by 55% below FY 2015 spending levels, even though the NSF is the primary source of federal support for these areas of research. [Fact Sheet, May 2015]
- Slashing funding for geosciences, which includes research in ocean sciences, natural hazards research, weather, and the polar programs, by 8% below FY 2015 spending levels. [Fact Sheet, May 2015]
- Cutting the Commerce Department's Manufacturing Extension Partnership Program by 5% below FY 2015 spending levels. This program supports grants between industry and researchers to develop new manufacturing processes, techniques, or materials; a manufacturing fellowship program for post-doctoral students; and a manufacturing research database to assist businesses in getting access to current information. [Minority Report, 5/8/15]
- Cutting Energy Efficiency and Renewable Energy (EERE) and Advanced Research Projects
 Agency-Energy (ARPA-E) by 29% and 50%, respectively, below FY 2015 spending levels.
 ARPA-E funds research to develop entirely new technologies to generate, store, and use energy
 that are too early for private-sector investment. EERE funds research into energy efficiency and
 renewable energy innovation. [Fact Sheet, May 2015]
- Restraining the Department of Energy's (DOE) climate change research efforts by prohibiting research on technologies that reduce emissions of carbon pollution, a threat to public health and the environment. [Fact Sheet, May 2015]
- Blocking the Environmental Protection Agency or Federal Energy Regulatory from using the most up-to-date DOE research findings in setting rules to protect our air, water, and land. [Science Magazine, 4/22/15]
- Imposing a level of political review on NSF's merit-review system, which will discourage scientists from pursuing innovative research. [Fact Sheet, May 2015]

The bill is overwhelmingly opposed by a <u>broad range of stakeholders</u>, including leaders in the scientific, research, and education communities:

Truman National Security Project: "[W] urge you to withdraw the America COMPETES Reauthorization Act of 2015, which would bar the Department of Energy from continuing a four-year collaboration with the Departments of Defense and Agriculture to develop cost-effective advanced biofuels... We have learned firsthand that oil truly is the Achilles' heel of our military... Members of the military from every rank and service have spoken out in favor of the continued investment in biofuels for reasons of cost and capabilities alike. These voices, rather than political leanings or parochial interests, must steer national security policy. Accordingly, we urge you to withdraw the America COMPETES Reauthorization Act of 2015 and to ensure that the U.S. military is free to pursue the fuel sources its leaders deign necessary for maximum operational and tactical success." [Letter, 4/21/15]

American Institute of Biological Sciences: "The bill, as introduced, would cut funding for the Biological and Environmental Research program by seven percent below the FY 2015 funding level. This program supports important research in the areas of genomic science, bioenergy, and environmental research. In addition to advancing U.S. energy independence, this program supports research and environmental models that are part of broader efforts to understand the linkages among water, energy, and climate." [Letter, 4/21/15]

<u>Coalition for National Science Funding</u>: "For the United States to remain globally competitive, it is essential that Congress continue to provide NSF the ability to fund grant proposals that advance knowledge in promising scientific areas, whether within or across fields, including the physical, mathematical, natural, social and behavioral sciences, engineering and computer sciences. This broadbased approach has driven American pre-eminence in innovation for decades and will continue to serve us well long into the future." [Letter, 4/21/15]

<u>Several Environmental Organizations</u>: "In order to end America's dependence on dirty, polluting energy, we need to quickly expand all kinds of clean energy—from solar panels on homes to large-scale wind and solar projects. Several Department of Energy (DOE) programs including the Office of Energy Efficiency and Renewable Energy (EERE), Biological and Environmental Research program, and Advanced Research Projects Agency-Energy (ARPA-E) are helping ensure that we meet this goal. Instead of supporting these critical programs, this bill severely cuts these office budgets." [Letter, 4/22/15]

Task Force on American Innovation: "[W]e have serious concerns about the consequences of major cuts to DOE programs, including Biological and Environmental Research, ARPA-E, and Energy Efficiency and Renewable Energy, as well as funding for the NSF's Social, Behavioral, and Economics Sciences and Geosciences directorates... We are concerned that a lack of new resources for research, at a time when our economic competitors are investing heavily in R&D, is creating an innovation deficit for the United States that threatens our global leadership in innovation and our international competitiveness. The programs included in this bill, if funded robustly, will play an important role in sustaining that leadership for many years into the future." [Statement, 4/21/15]

American Educational Research Association: "...[A]spects of the America COMPETES Reauthorization Act of 2015 (H.R. 1806) are inharmonious with the foundational goals of NSF and science. In fact, several provisions in the bill could actually limit the NSF's ability to fulfill its statutory purpose... Now is not the time for flat funding or to constrain our nation's brightest scientists. Rather, we must continue to invest in the most compelling science to nurture scientific breakthroughs, advance fundamental knowledge across all fields of science and prepare our next generation of scientists." [Letter, 4/21/15]

Alliance to Save Energy: "[W]e strongly believe that failing to provide robust federal funding for energy efficiency research and development (R&D) will undermine our national economic, environmental and security interests... To cut energy efficiency R&D now would shortchange American taxpayers and cut them out of the energy savings and jobs created by energy efficiency. However, by investing in energy efficiency R&D, we can lessen our dependence on imported energy sources, reduce pollution, improve America's competitiveness in the global marketplace, alleviate stress to the electric grid and water infrastructure, and forestall the need for costly new electricity generating capacity." [Letter, 4/21/15]

Environmental and Energy Study Institute and the Center for Small Business and the Environment: "The COMPETES Act as written contains some policy-related provisions that we believe could have a serious negative impact on long-term U.S. competitiveness, security and economic health. As noted, the proposal to prohibit federal regulatory authorities from considering the results of DOE-supported R&D seems to us a self-defeating action. Similarly, we also are very concerned about provisions that could undermine or even reverse gains we've made toward a sustainable transportation sector from R&D in biofuels and advanced electric vehicle and battery technologies." [Letter, Spring 2015]

<u>Consortium for Ocean Leadership</u>: "Before [Republicans] take such a drastic step, I hope they reconsider the adverse consequences it would have to the environment, the economy, and national security." [Science Magazine, <u>4/22/15</u>]

<u>Law & Society Association</u>: "This change increases the probability that political considerations will intrude in setting scientific priorities rather than relying on expert peer review and the responsibility delegated to the National Science Board and the Foundation's leadership to make difficult scientific choices about how best to balance different kinds of disciplinary and interdisciplinary research in the national interest." [Letter, <u>5/1/15</u>]

<u>Computing Research Association</u>: "In particular, we are disappointed to note that the bill, by flat-funding science agencies in the second year of authorizations, fails to provide for steady and real growth in the Federal investment in research, something we believe is critical to our Nation's ability to compete, prosper and be secure in the coming years and decades." [Letter, 4/21/15]

<u>American Anthropological Association</u>: "The damage to the U.S. scientific enterprise would be irreparable and impact colleges and universities across the country, including those in your districts. Such a cut would undermine research that has already provided a significant benefit to America and societies throughout the world." [Letter, <u>4/16/15</u>]